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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/627,304	07/27/2000	Kyoichi Terao	041465-5083	1116

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EXAMINER	
ONUAKU, CHRISTOPHER O	
ART UNIT	**PAPER NUMBER**
2616	

DATE MAILED: 12/02/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No.	Applicant(s)	
	09/627,304	TERAO ET AL.	
	Examiner	Art Unit	
	Christopher O. Onuaku	2616	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☐ Responsive to communication(s) filed on _____.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-8* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *,1,2,4,5&8* is/are rejected.

7)☒ Claim(s) *3,6 and 7* is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☒ All b)☐ Some * c)☐ None of:

1.☒ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date _____.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application (PTO-152)
6) ☐ Other: _____.

DETAILED ACTION

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1,2,4&8 are rejected under 35 U.S.C. 102(b) as being anticipated by Roth et al (US 5,463,607).

Regarding claim 1, Roth et al disclose an information recording and read system of the type having scanning means for scanning a track on a record carrier of an inscribable type for the purpose of recording and reading information thereon, comprising:

a) a processing unit for processing recording information to be recorded and for generating processed information (see Fig.1, microcomputer 10; col.5, line 34 to col.6, line 35), the micro computer 7 is coupled to the clock signal generators 8 and 9 for activating and de-activating the generation of of the clock signals supplied by the generators 8&9; the microcomputer 10 supplies a control signal to the driver circuit 7, and driver circuit 7 is constructed in such a way that depending upon the received control signal the read/write head 3 is set to the read mode or to the write mode, and when analog information to be recorded is supplied to the A/D converter 5, the A/D

converter 5 is activated by activating the generation of the clock signal c11, and the recording starts under control of the microcomputer 10;

b) a storage unit for temporarily storing the processed information (see Fig.1; buffer memory 6; col.6, line 1-34), here, after the processing by the A/D converter 5, the digitized information is loaded into the input buffer memory 6, temporarily, from which the loaded information is finally transferred and recorded in the information carrier 2;

c) a recording unit for recording the processed information onto an information storage medium (see Fig.1; record carrier 2; col.5, line 63 to col.6, line 35), here the processed digital information is recorded on the record carrier 2;

d) a position storing unit for storing, at a time of interruption storage position which is a storage position in the storage unit of the processed information corresponding to a timing at which interruption is instructed (see Fig.1; the memory of microcomputer 10; col.6, lines 35-51);

e) an interrupting unit for interrupting recording of the processed information after storing the interruption storage position (see col.6, line 62 to col.7, line 3);

f) a restart unit for restarting the recording of the processed information based on the stored interruption storage position (see col.6, lines 25-35 and col.7, lines 21-25).

Regarding claim 2, Roth et al discloses wherein the position storing unit stores the storage position in the storage unit of the processed information inputted to the storage unit at an interruption instruction timing as the interruption storage position (see Fig.1; the memory of microcomputer 10; col.6, lines 35-51).

Regarding claim 4, Roth et al discloses wherein the restart unit restarts, after the interruption instruction timing, the recording of the processed information from restart processed information which is the processed information to be recorded after the recording of the processed information is interrupted (see col.6, lines 25-35 and col.7, lines 21-25).

Regarding claim 8, Roth et al disclose wherein the recording information is audio information which is to be recorded on the information storage medium together with corresponding video information (see col.7, lines 33-48).

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

4. Claim 5 is rejected under 35 U.S.C. 103(a) as being unpatentable over Roth et al in view of Komatsu et al (US 4,992,891).

Regarding claim 5, Roth et al fail to explicitly disclose wherein the restart unit restarts the recording of the processed information by fading in the restart processed information to be recorded on the information storage medium.

Komatsu et al teach a magnetic recording and playback apparatus/system suitable for providing dissolving views, or splicing, not giving a feeling of unnaturalness when applied to a VTR incorporating a camera, including a system, in which, when splicing is performed such that recording operation is temporarily stopped after one scene (picture image) has been taken (hereinafter to be called a REC pause state) and after a while another scene is recorded in continuance, the scene of one field just before the REC pause state is stored (see col.5, lines 28-38). The recording and playback apparatus/system includes fade-in circuit 305. The fade-in circuit, as the splicing is started, when the transition from the REC pause state to the recording state takes place, gradually effects fade-in of the output signal of the black peak clip circuit 304 over approximately three seconds (see col.6, lines 4-30). Here Komatsu clearly teaches the principle of fading-in processed information which was temporarily stopped (nterrupted during REC pause state) during the recording process.

It would have been obvious to modify Roth by realizing Roth with fade-in capability, as taught by Komatsu, since this provides the desirable advantage of effecting recording information fade-in process during recording restart of a temporarily stopped recording operation.

Allowable Subject Matter

5. Claims 3,6&7 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

6. The following is a statement of reasons for the indication of allowable subject matter:

Regarding claim 3, the invention relates to an information recording apparatus, including recording interruption control and recordinf restarting control at the time of interrupting and restarting information recording onto an information storage medium.

The closest reference Roth et al disclose an information recording and read system of the type having scanning means for scanning a track on a record carrier of an inscribable type for the purpose of recording and reading information thereon.

However, Roth et al fail to explicitly disclose an information recording apparatus, where thw apparatus comprises wherein the processing unit fades out the recording information after the interruption instruction timing to generate the processed information, wherein the storage unit stores the generated processed information onto an area in the storage unit where the processed information is to be stored after the interruption instruction timing, and wherein the interrupting unit reads out the fading-out processed information from the storage unit and stores the processed information onto the information storage medium and then inrrupts the recording of the processed information.

Conclusion

7. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Tsukihashi (US 6,584,053) teach a disk recording system which allows data to be recorded in addition to already recorded data, including a disk recording system which ensures continuity of recorded data even when buffer underruns occur.

Ohta et al (US 6,388,968) teach a signal recorder/reproducer for recording a signal into a recording medium and reproducing a signal recorded in the recording medium, and a signal recording/reproducing method applied to the signal recorder/reproducer.

Maeda et al (US 5,420,838) teach a disk recording/reproducing device for recording as well as reproducing information, for example, music information on and from a writable disk having absolute addresses.

8 Any inquiry concerning this communication or earlier communications from the examiner should be directed to Christopher O. Onuaku whose telephone number is (703) 308-7555. The examiner can normally be reached on M-F 8:30-6:00.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Andrew Faile can be reached on 703-305-4380. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

COO

11/23/04

TUAN TRAN
PRIMARY EXAMINER